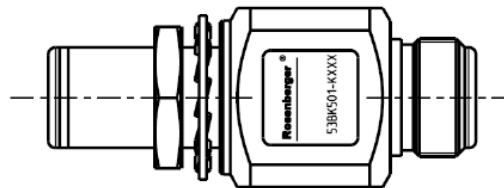
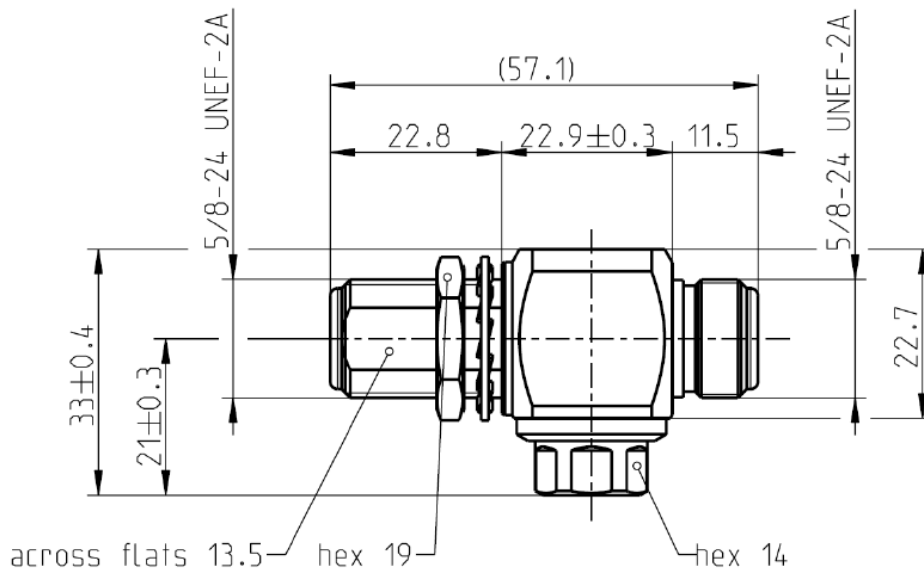


N 50 Ω

SURGE ARRESTER WITH  
GAS CAPSULE JACK –JACK

**53BK501-KXXXN1**



Ordering number	Voltage depends on gas capsule	Gas capsule order number
53BK501-K090N1	90V	53ZB01-090
53BK501-K230N1	230V	53ZB01-230
53BK501-K350N1	350V	53ZB01-350

All dimensions are in mm; tolerances according to ISO 2768 m-H

**Interface**

According to

IEC 61169-16, MIL-PRF-39012, CECC 22210

**Documents**

Assembly instruction  
Panel piercing

53 MV-A001  
B 13

**Material and plating**

**Connector parts**

Center contact  
Outer contact  
Body  
Dielectric  
Gasket  
Gasket

**Material**

CuBe  
Brass  
Brass  
PS  
Silicone  
NBR

**Plating**

Silver, 3-6 μm  
Flash white bronze over silver(e.g. Optargen®)  
Flash white bronze over silver(e.g. Optargen®)

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RF\_35/05.10/6.0

# Technical Data Sheet

# Rosenberger

N 50 Ω

SURGE ARRESTER WITH  
GAS CAPSULE JACK –JACK

**53BK501-KXXXN1**

## Electrical data

Impedance	50 Ω
Frequency	DC to 3 GHz
Return loss	≥ 30 dB @ DC to 1 GHz ≥ 17 dB @ 1 GHz to 2 GHz ≥ 10 dB @ 2 GHz to 3 GHz
Insertion loss	≤ 0.1 x √f [GHz] dB, DC to 1 GHz
Insulation resistance	≥ 5 GΩ
Center contact resistance	≤ 1 mΩ
Outer contact resistance	≤ 0.25 mΩ
Power handling (at 20 °C, sea level, VSWR 1.0)	P=U <sup>2</sup> /R (W)
RF-leakage	≥ 128 dB up to 1 GHz
Nominal impulse discharge current	20 kA, Wave 8/20 μS
Rated threshold voltage DC	90V, Gas capsule order no.: 53ZB01-090 230V, Gas capsule order no.: 53ZB01-230 350V, Gas capsule order no.: 53ZB01-350
Rated discharge current	20 A AC
Attack time	8 μs

## Mechanical data

Mating cycles	≥ 500
Center contact captivation: axial	≥ 28 N
Coupling test torque	≤ 1.7 Nm
Recommended torque	0.7 Nm to 1.1 Nm
Screw tightening torque with gas capsule	9 Nm min.

## Environmental data

Temperature range	-25 °C to +85 °C
Thermal shock	MIL-STD-202, Method 107, Condition B
Corrosion resistance	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition B
Shock	MIL-STD-202, Method 213, Condition I
Moisture resistance	MIL-STD-202, Method 106
Degree of protection (mated pair)	IEC 60529, IP68
RoHS	compliant

## Weight

Weight	237 g/pce
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While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
Rong Fang	15/04/11	Sa. Krautenbacher	18.03.14	b00	14-0352	T. Krojer	18.03.14
Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany <a href="http://www.rosenberger.de">www.rosenberger.de</a>					Tel. : +49 8684 18-0 Fax : +49 8684 18-499 Email : <a href="mailto:info@rosenberger.de">info@rosenberger.de</a>		Page 2 / 2